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09/695,226	10/25/2000	Paul D. Marko	39566	2888

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EXAMINER
PHUNKULH, BOB A

ART UNIT	PAPER NUMBER
2661	4

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO 90C (Rev 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _25 October 2000_.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-19_ is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) _1,2,5-8 and 11-19_ is/are rejected.
7) ☒ Claim(s) _3,4,9 and 10_ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. _____.
    3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _3_.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____ .

DETAILED ACTION

Claim Objections

Claim 17 is objected to because of the following informalities: a claim can't

depends on itself. For examination, the examiner regards the claim depends on claim

16. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 5-8, 11-13 are rejected under 35 U.S.C. 102(e) as being anticipated

by Picco et al. (US 6,029,045), hereinafter Picco.

Regarding claim 1, Picco discloses an apparatus for generating an output signal

from a broadcast signal in a digital broadcast system comprising.

a memory device for storing predefined content segments (disk 186 for storing

local content, see figures 7-8)

a receiver for receiving said broadcast signal, said broadcast signal comprising

content segments and control data provided among said content segments to indicate

when said predefined content segments are to be inserted in said output signal by said apparatus, said receiver being operable to extract said content segments and said control data from said broadcast signal (see figures 7 and 8);

an output device for playing back said output signal (audio or video or graphic outputs, see figures 7-8);

a processing device configured to receive said control data from said receiver and to generate a control signal used by said memory device to retrieve selected ones of said predefined content segments in accordance with said control data (the CPU 188, see figures 7-8); and

a multiplexer configured to receive as inputs said control signal generated by said processing device, said content segments from said receiver and said selected predefined content segments and to generate said output signal using said content segments received by said receiver and inserting said predefined content segments among said content segments in accordance with said control data (the combination of MUX audio 206 and MUX video 208 see figure 8, and col. 10 lines 34 to col. 13 line 35 for detail).

Regarding claim 2, Piccio discloses the memory device comprises index data with which to identify each of said predefined content segments stored therein, and said control data comprises said index data corresponding to the selected said predefined content segments, said processing device being operable to provide said index data in said control data in said control signal for retrieving said predefined

content segments corresponding thereto from said memory device (col. 11 lines 35-47).

Regarding claim 5, Piccio discloses the processing device is programmable to allow said predefined content segments in said memory device to be updated (col. 9 line 61 to col. 10 line 33).

Regarding claim 6, Piccio discloses the receiver is operable to receive broadcast content in said broadcast signal for updating said predefined content segments, and said processing device is operable to control said memory device to perform at least one of a plurality of updating operations comprising deleting selected ones of said predefined content segments, adding more predefined content segments, and substituting received said predefined content segments for previously stored ones of said predefined content segments (see col. 9 lines 61 to col. 10 line 33).

Regarding claim 7, Picco discloses a method for generating an output signal at a receiver using a broadcast signal transmitted in a digital broadcast system comprising the steps of:

storing predefined content segments in a memory device associated with said receiver (equipment at the data transmission facility that assembles and delivers local content to be inserted into the live data streams at a later time and transmits individualized instructions to each set-top box about what local content should be

stored and when each piece of local content should be inserted into the live data stream, see col. 3 lines 1-9);

receiving said broadcast signal at said receiver, said broadcast signal comprising segments of program content and segments of control data (within each PID, there is a television signal 70 that includes a data stream 72 containing the television programming data and a local content space 7, see col. 5 lines 49-51);

accessing and retrieving selected said predefined content segments identified by said control data from said memory device (once the selected pieces of local content are stored on the disk of the set-top box, the pieces of local content may be inserted into the programming data. The storing and insertion of local content into the programming data for a viewer may be customized based on the preferences of a viewer, see col. 3 lines 25-29) ; and

playing back the selected said predefined content segments at selected points in said output signal in accordance with said control data (the storing and insertion of local content into the programming data for a viewer may be customized based on the preferences of a viewer, see col. 3 lines 25-29).

Regarding claim 8, Picco discloses the memory device (the disk, see col. 10 lines 59 to col. 11 line 17) comprises index data with which to identify each of said predefined content segments stored therein, and said control data comprises said index data corresponding to the selected said predefined content segments, said accessing step comprises the step of providing said index data in said control data to a processing

device for retrieving said predefined content segments corresponding thereto from said

memory device (see col. 11 lines 18-48).

Regarding claim 11, Picco discloses the step of updating said predefined

content segments in said memory device (col. 9 line 61 to col. 10 line 33).

Regarding claim 12, Picco discloses the updating step comprises the step of

receiving broadcast content in said broadcast signal for updating said predefined

content segments (col. 9 line 61 to col. 10 line 33).

Regarding claim 13, Picco discloses the updating step comprises the step of

retrieving program content stored on a portable storage medium to update said

predefined content segments in said memory device (col. 9 line 61 to col. 10 line 33).

Regarding claim 15, Picco discloses an apparatus for generating an output

signal from a broadcast signal in a digital broadcast system comprising:

a memory *device* for storing content segments (disk 186, see figures 7 or 8);

an output device for playing back said output signal (either audio or video or

graphics outputs, see figures 7 and 8);

a receiver for receiving said broadcast signal, said broadcast signal comprising

control data to indicate which said content segments to playback via said output device

and when said content segments are to be played back, said receiver being operable to extract said control data from said broadcast signal (see figures 7 and 8);

a processing device configured to receive said control data from said receiver, to generate a control signal used by said memory device to retrieve selected ones of said control segments in accordance with said control data, and to playback the selected said control segments substantially in real.-time with respect to said broadcast signal (the CPU 188, see figures 7-8; and col. 10 lines 34 to col. 13 line 35 for detail).

Regarding claim 16, Picco discloses the control data in said broadcast signal comprises segment data corresponding to each of the selected ones of said content segments for playback, said segment data for a content segment comprising progress information indicating how much of the content segment remains to be played back via said output device at any given point during the duration of the content segment for substantially real-time playback during reception of said broadcast signal (see col. 10 lines 57-63, and col. 11 line 35-48).

Regarding claim 17, Picco discloses the control data in said broadcast signal comprises segment data corresponding to each of the selected ones of said content segments for playback, said segment data for a content segment being transmitted in lieu of the content in the content segment to reduce bandwidth used to transmit said broadcast signal (col. 11 line 35-48).

Regarding claim 18, Picco discloses the segment data has substantially the same duration for transmission in said broadcast signal as the content in the content segment to which said segment data corresponds (see figure 2)

Regarding claim 19, Picco discloses the segment data for a content segment comprises a content segment index used by said processing device to locate the content segment in said local storage device, and progress information indicating how much of the content segment remains to be played back, said content segment index and said progress information requiring less bandwidth for transmission in said broadcast signal than the content in the content segment (see figures 10 and 11).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 14 is rejected under 35 U.S.C. 102(b) as being anticipated by Clark et al. (US 5,864,747), hereinafter Clark.

Regarding claim 14, Clark discloses a transmitter in a digital broadcast system comprising:

an input device for receiving content segments (input video, input audio, see

figure 2);

a memory device for storing index data for identifying predefined content

segments stored at remote locations (program guide 45, see figure 2 and col. 5 lines

28-33);

a multiplexer for multiplexing selected said content segments with at least said

index - data to generate a broadcast signal having, said broadcast signal comprising

said content segments with said index data inserted at selected being used by receiver

units at said remote locations to playback said content segments (the multiplexe 50,

see col. 6 lines 23-33).

Allowable Subject Matter

Claims 3-4, and 9-10 are objected to as being dependent upon a rejected base

claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.

Conclusion

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for formal communications intended for entry)

Or:

Hand-delivered responses should be brought to Crystal Park II, 2021

Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Bob A. Phunkulh** whose telephone number is **(703) 308-8251.** The examiner can normally be reached on Monday-Friday from 8:00 A.M. to 4:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor **Douglas W. Olms**, can be reach on **(703) 305-4703.** The fax phone number for this group is **(703) 872-9314.**

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bob A. Phunkulh

TC 2600
Art Unit 2661
June 28, 2004